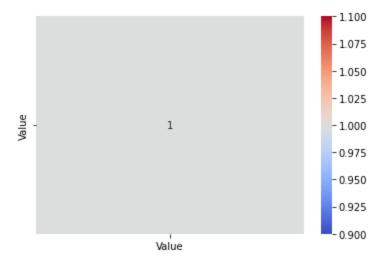
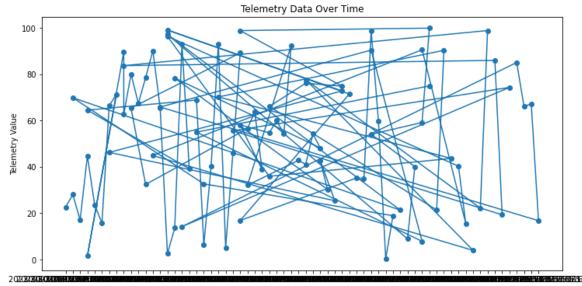
```
In [1]:
         import pandas as pd
         import matplotlib.pyplot as plt
         import seaborn as sns
 In [2]:
         # Load telemetry data into a pandas DataFrame
         telemetry_data = pd.read_csv('telemetry_data.csv')
 In [3]: # Handle missing values if any
         telemetry_data.dropna(inplace=True)
In [19]:
         # Convert data types if necessary
         telemetry_data['Timestamp'] = pd.to_datetime(telemetry_data['Timestamp'])
In [5]:
         # Handle duplicates if any
         telemetry_data.drop_duplicates(inplace=True)
In [6]: # Summary statistics
         print(telemetry_data.describe())
                     Value
         count 100.000000
         mean
                 53.243637
         std
                 28.432671
         min
                 0.376006
         25%
                 31.631423
         50%
                 55.281891
         75%
                 74.822008
                 99.825072
         max
         # Check correlations between variables
 In [7]:
         correlation_matrix = telemetry_data.corr()
```

In [8]: # Visualize correlations using a heatmap sns.heatmap(correlation_matrix, annot=True, cmap='coolwarm') plt.show()



```
In [16]: # Time series plot
    plt.figure(figsize=(12, 6))
        plt.plot(telemetry_data['Timestamp'], telemetry_data['Value'], marker='o', line
        plt.xlabel('Timestamp')
        plt.ylabel('Telemetry Value')
        plt.title('Telemetry Data Over Time')
        plt.show()
```



Timestamp

In [17]: # Histogram plt.hist(telemetry_data['Value'], bins=30, color='skyblue', edgecolor='black') plt.xlabel('Telemetry Value') plt.ylabel('Frequency') plt.title('Telemetry Data Distribution') plt.show()

